88888888888888888888888888888888888888	000000000 000000000 000000000	000000000		\$
888 888 888 888	000 000 000 000	000 000 000 000	111 111 111	\$\$\$ \$\$\$ \$\$\$ \$\$\$
888 888 888 888	000 000	000 000	iii	\$\$\$ \$\$\$
888 888888888888	000 000	000 000	iii	\$\$\$ \$\$\$ \$
888888888888 88888888888	000 000	000 000	††† †††	\$\$\$\$\$\$\$\$\$ \$\$\$\$\$\$\$\$\$
888 888 888	000 000	000 000	111	SSS
888 888 888 888	000 000	000 000	111	\$\$\$ \$\$\$ \$\$\$
888 BBB BBB	000 000	000 000	III	\$\$\$ \$\$\$
888888888888 888888888888 88888888888	00000000 00000000 00000000	00000000 00000000 00000000	111 111 111	\$

00000000 00000000 00000000 00000000000	000000 00 00 00 00	NN	FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF	GGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	RRRRRRRR RRRRRRRR RR RR RR RR RR RR RRRRRR
		\$			

\*\*FILE\*\*ID\*\*CONFIGURE

CONFIGURE Table of co	ontents	- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 VAX/VMS Macro V04-00	
(1)	140 240 308 399 447	CONFIGURE - Configure devices FOUND_PROC - A process has been found by the poller PROCESS_MSG - Do the work of configuring the device BLDNAME EXIT_HANDLER	

Page 0

- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 VAX/VMS Macro V04-00 Page 1 (1)

.TITLE CONFIGURE - PROCESS TO DYNAMICALLY CONFIGURE DEVICES

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Facility: System configuration

Abstract: CONFIGURE is used to dynamically configure VAX MSCP-served and HSC-served disks and tapes.

Environment: It is run as a process, in user, exec and kernel modes.

Author: Maryann Hinden, Creation date: 02-JUN-1983

Modification History:

18

38 39

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0000 0000

0000 0000

V03-004 WHM0001 Bill Matthews 11-Apr-1984 Purge working set before hibernating.

v03-003

Change value in BOO\$GL\_CONADP to indicate noadapter.

V03-002 WMC0001 Wayne Cardoza 11-Aug-1983 Polling must be reenabled in kernel mode.

V03-001 MSH0001 Maryann Hinden 14-Jul-1983 Add jacket routine B00\$CONFIGMN to image, and remove some code.

Include files:

SACFDEF

: Define autoconfiguration block

```
- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 VAX/VMS Macro VO4-00 4-SEP-1984 23:03:46 [BOOTS.SRC]CONFIGURE.MAR;1
                                                                                                               SIODEF
                                                                                                               SIPLDEF
                                                                                                                SLCKDEF
                                                                                                                SPRCPOLDEF
                                                                                                                                                                                                                                        ; Define process poller mailbox offsets
                                                                                                                $SBDEF
                                                                                                                                                                                                                                        ; System status definitions
                                                                                                                $SYSGMSGDEF
                                                                                                                                                                                                                                        ; Sysgen messages
                                                                               Equated Symbols
00000123
                                                                               WRTATNFLG = <10$_SETMODE!10$M_WRTATTN>
READFLG = <10$_READVBLK!10$M_NOW>
00000000
00000010
00000012
00000018
                                                                                SERVER = 0
DEVICE = 16
                                                                                                                                             ; Offsets into process info block
                                                                               DRIVER = 18
SPPB = 27
                                                                              Macros
                                                                                                               .MACRO PRCINFO SERVER, DEVICE, DRIVER
                                                                                                                                                                                                                                                                 : Builds process info table
                                                                                                               .PSECT INFO_BLOCK
                                                                                                                                                                                                                                                                       : Actual data area
                                                                               $SERVERNAME$ = .
                                                                              SNAMENDS = .
                                                                                                                                                                                                                                                                             Reserve room for all 16 chars
                                                                                                                                                                                                                                                                             Remember end of block
                                                                               . = SSERVERNAMES
                                                                                                                                                                                                                                                                             Get back to beginning
                                                                87 - SERVER

88 - SASERVER

89 - SNAMEND

90 - AS

91 - AS

92 - LO

93 - PS

96 - LO

97 - PS

100 : Own Stora

101 : PS

103 - PS

104 - PROC_IMFO: PRO

107 - PS

108 - PS

109 - LO

110 - PS

108 - PS

109 - LO

110 - PS

101 - PS

102 - PS

103 - PS

104 - PS

105 - PS

106 - PS

107 - PS

108 - PS

109 - LO

110 - PS

110 - PS

111 - PS

113 - PS

113 - PS

114 - PS

115 - PS

116 - PS

117 - PS

118 - PS

119 - PS

110 - PS

110 - PS

111 - PS

111 - PS

112 - PS

113 - PS

114 - PS

115 - PS

116 - PS

117 - PS

118 - PS

119 - PS

110 - PS

111 - PS

111 - PS

111 - PS

112 - PS

113 - PS

114 - PS

115 - PS

116 - PS

117 - PS

118 - PS

118 - PS

119 - PS

110 - PS

110 - PS

110 - PS

110 - PS

111 - PS

111 - PS

113 - PS

114 - PS

115 - PS

116 - PS

117 - PS

118 - PS

1
                                                                                                                                                                                                                                                                     : Now store the real name
: Go to end of block
: Device name
                                                                                                               .ASCII /SERVER/
                                                                                . = SNAMENDS
                                                                                                              .ASCII /DEVICE/
.ASCIC /DRIVER/
                                                                                                                                                                                                                                                                      Driver name
SPPB for polling this process
                                                                                                               . LONG
                                                                                                               .PSECT INFO_PTR
                                                                                                                                                                                                                                                                      ; A list of pointers to the data
                                                                                                               .LONG
                                                                                                                                           $SERVERNAME$
                                                                                                               .ENDM
```

: Build the process info table

: Patch area for four more processes

: Indicate end of table

; Patch area for data

Own Storage

.PSECT INFO\_PTR

.PSECT INFO\_PTR

. LONG

.BLKL

.PSECT

.BLKB

PRCINFO MSCPSDISK, DU. DUDRIVER PRCINFO MSCPSTAPE, MU, TUDRIVER

INFO BLOCK <SPPB+4>+4

00000000

0000003E

8000 0000000 8000 00000000

00000010

000000BA

- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 VAX/VMS Macro V04-00 Page 3 (1)

00000000 00000016 0000 0000001B 0016	115 116 FULL NAME: 117 DEVNAME:	NONPAGED DATA, NOEXE, WRT .BLKB 22 .BLKB 5	; Storage area for cluster dev name ; Storage area for short dev name
00000016 0000 0000001B 0016 001B 00000000 001B 00000251 001F 00000001 0023 0000002B 0027 0000002F 002B	119 EXT_BLOCK: 120 121 122 123 EXIT_STATUS:	.LONG 0 .LONG EXIT_HANDLER .LONG 1 .LONG EXIT_STATUS .BLKL 1	; Data block for exit handler
000000033 002F 00000000 0033	125 KARGLST: 126 SPPBARG:	LONG SPPBARG	; Argument list for CANCEL_POLL ; kernel mode routine
00000038 0037 00000073 0038	128 MSGBUFSIZ: 129 MSGBUF:	.LONG PRCPOLSC_SIZ .BLKB PRCPOLSC_SIZ	; Buffer used by mailbox read
0000 0073 0000007D 0075	131 MBXCHAN: 132 STATUS_BLOCK:	.WORD 0 .BLKL 2	: Mailbox I/O channel : I/O completion status block
00000000 0000 0000 0000 0000 7FFFFFFF 0004	PSECT 135 PURGE_LIMITS: 136 .LONG 137 .LONG	PAGED_CODE,EXE,WRT  0  X7FFFFFFF	; Limits for purge working set ; Purge all of PO and P1

```
- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 CONFIGURE - Configure devices 4-SEP-1984 23:03:46
                                                                                                                   VAX/VMS Macro V04-00
[BOOTS.SRC]CONFIGURE.MAR:1
                                                                                                                                                                  Page
                                                   .SBTTL CONFIGURE - Configure devices
                                           PURPOSE
                                                   To start polling on cluster members in order to find out about HSC- and MSCP-served devices on other systems.
                                           INPUT
                                                   None
                                           OUTPUT
                                                   None
                                           FUNCTIONAL DESCRIPTION
                                                   This routine requests polling on all systems in the cluster for all processes described in the process information table. The process poller communicates with the CONFIGURE process via a mailbox. Once the polling requests have been sent out, a write attention AST to the mailbox is issued, and the routine hibernates waiting for input.
                                158
159
160
161
163
164
167
168
169
                                                   In order to cancel polling (and clean up properly) if the image
                                                   should terminate abnormally, this routine declares an exit handler.
         001C
                                                   .ENTRY BOOSCONFIGURE, ^M<R2,R3,R4>
                                           Create mailbox used to communicate with process poller
                                                                             prmflg = #1,-
chan = MBXCHAN,-
                                                   SCREMBX_S
                                                                             promsk = # XFF00
60 50
                                                                RO,10$
                                                   BLBC
                                           Declare exit handler to be used when image exits
                                                  SDCLEXH_S
BLBC RO,10$
                                                                             desblk = EXIT_BLOCK
50 50
                                          Now request polling on all processes
                                                  SCMKRNL_S
RLBC RO,10$
                                                                             REQ_POLL, (AP)
3E 50
             E9
                                          We are finished requesting polling. Now set a write attention AST and hibernate while waiting for responses from the poller. (We assume that at least one call to SCS$POLL_MBX was successful).
                                                                chan
                                                                             = MBXCHAN,-
                                                   $010_5
                                                                             = WWRTATNFLG .-
                                                                func
                                                                             = FOUND_PROC .-
                                                                p1
                                                                P2
R0,10$
                                                                             = PROC_INFO
12 50
                                                   BLBC
```

CONFIGURE VO4-000	- PROCES CONFIGUR	TO DYMAMICALLY CONFIGURE DEVIC 15-SEP-1984 E - Configure devices 4-SEP-1984	23:46:18 VAX/VMS Macro V04-00 Page 23:03:46 [BOOTS.SRCJCONFIGURE.MAR;1
	007 007 008 04 008 008	\$ 197 5 198	ITS ; minimize system resources
	008 008 008 008 008	8 203 : 8 204 : An error occured on the create ma	silbox, when calling the process Send out the error message and terminate. this point) will clean up.
50	007C8132 8F DO 008	208 108: MOVL #SYSG\$ CONFIGERR, RO BSBW PUTERROR 210 SEXIT_S	
	04 009	211 RET	
	009 009 0000 009	213 : Request polling on all processes 214 : 215 REQ_POLL: .WORD 0	we want to know about
53 54	00000073'EF 3C 00A 00000000'EF 9E 00A 52 84 D0 00A	216 217 SETIPL WIPLS ASTDEL 1 218 MOVZWL MBXCHĀN,R3 3 219 MOVAB PROC INFO.R4	Get channel address Get top of process table Get address of first process name
	50 53 D0 00B 00000000°EF 16 00B 00B	220 MOVL (R4) ∓, R2 221 222 10\$: MOVL R3, R0 5 223 JSB SCS\$POLL_MBX 3 224	; Channel # in RO is arg to call ; Request polling for this process
	008 008 008	225 : 226 : R1 contains address of SPPB - need 227 : R2 is preserved and points to prod	f later to cancel polling cess info block
	00000000°EF 16 00B 00B 00B 00B 00B 00B 00B 00B 00B 00	227; R2 is preserved and points to process 228; 229 BLBC R0,20\$ 230 MOVL R1,SPPB(R2) 231 MOVL (R4)+,R2 232 BNEQ 10\$ 233 MOVZBL #SS\$_NORMAL,R0	: Save SPPB : Get next process name : If NEQ, poll for it : Indicate success
	00C 00C 04 00C	232 BNEQ 10\$ 7 233 MOVZBL #SS\$_NORMAL,RO A 235 20\$: A 236 SETIPL #0 RET	: Lower IPL : Return error to caller

(1)

```
- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 FOUND_PROC - A process has been found by 4-SEP-1984 23:03:46
                                                                                                        VAX/VMS Macro V04-00
[BOOTS.SRC]CONFIGURE.MAR;1
                                                      .SBTTL FOUND_PROC - A process has been found by the poller
                                               PURPOSE
                                                      Routine which is called when the process poller mailbox has been
                                                      written into.
                                               INPUT
                                                      Mailbox messages - implicit
                                               OUTPUT
                                                      Processed messages
                                               FUNCTIONAL DESCRIPTION
                                                      This routine is called at AST level. It first re-enables the write attention AST for the mailbox. It then reads and processes
                                                      messages until there are none left.
                     007C
                                                      .ENTRY FOUND_PROC, ^M<R2,R3,R4,R5,R6>
                                               Before doing anything else, we requeue the write attention AST request
                                                      $010_S
                                                                chan
                                                                          = MBXCHAN,-
                                                                func
                                                                          = WWRTATNFLG,-
                                                                p1
p2
R0,30$
                                                                          = FOUND_PROC.-
                                                                          = PROC_INFO
                             00F 9
00F 9
00F 9
00F 9
00F 9
              47 50
                                                      BLBC
                                               Now, read mailbox messages until there are none left
                                                                          = MBXCHAN,-
                                           105:
                                                      $010_S
                                                                chan
                                                                func
                                                                          = #READFLG,-
                                                                          = STATUS_BLOCK,-
                                                                iosb
                                                                p1
p2
R0,40$
                                                                          = MSGBUF .-
                                                                          = MSGBUFSIZ
                                                      BLBC
                        E9
9E
13
E9
30
     00000075
                                                                STATUS_BLOCK,R4
                                                      MOVAB
                                                                                                 Get address of status block
                                                                 (R4) ,#55$_ENDOFFILE
                                                      CMPW
                                                                                                 Have we read all the msgs?
                                                               20$
(R4),40$
                                                                                                 If EQL, yes
If LBC, then some sort of error
Else the poller found something
                                                      BEQL
                                                      BLBC
                                                                PROCESS_MSG
                                      2845
2856
2886
2889
293
293
293
293
295
296
                                                      BSBW
                                                      BRB
                                                                                               : Look for more messages
                                           20$:
                        04
                                                      RET
                                               An error has occurred when trying to requeue the write attention AST.
                                               Have the image exit.
                                           305:
                                                                #SYSG$ CONFIGERR, RO
PUTERROR
50
      007C8132 8F
                                                      MOVL
               FEB6'
                                                      SEXIT_S
```

(1)

CONFIGURE v04-000

- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 VAX/VMS Macro v04-00 FOUND\_PROC - A process has been found by 4-SEP-1984 23:03:46 EBOOTS.SRCJCONFIGURE.MAR;1

04 0153 297 RET
0154 299 :
0154 300 : An error has occurred when reading the mailbox message. Send out the
0154 301 : error message and dismiss the AST.
0154 302 CONFIGURE.MAR;1

50 007C8132 8F DO 0154 304 MOVL #SYSG\$ CONFIGERR,RO
BSBW PUTERROR
04 015E 306 RET

(1)

18 A6

0000000°EF

00000000 EF

12 50

01B4

01BB

55

00000000 EF

65

```
- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 VAX/VMS Macro V04-00 PROCESS_MSG - Do the work of configuring 4-SEP-1984 23:03:46 [BOOTS.SRC]CONFIGURE.MAR;1
                                                                                                                                                      Page
                                                                                                                                                              (1)
                                                          .SBITL PROCESS MSG - Do the work of configuring the device
                                          310
                                                   PURPOSE
                                                          Workhorse routine to actually configure the device database for the server which has been found.
                                                   INPUT
                                                          MSGBUF - contains the actual message
                                                   OUTPUT
                                                          Configured device and driver
                                                   FUNCTIONAL DESCRIPTION
                                                          This routine uses the node name (contained in the message) together
                                                          with the information associated with the server process name to
                                                          construct a cluster device name. It then calls the connect code
                                                          to actually construct the device database and load the class driver.
                                               PROCESS_MSG:
PUSHR
            007C 8F
EF 00
                          BB
FB
                                                                     #*M<R2,R3,R4,R5,R6>
                                                                                                        Save registers touched here
00000000 'EF
                                                          CALLS
                                                                     #0.BOOSCONRESET
                                                                                                      : Reset connect information
                                016A
                                016A
                                                  Search through the list of processes we are looking for to see if there is a match
                                016A
                                016A
                                016A
       00000038 EF
                                                          MOVAB
                                                                     MSGBUF, R6
                                                                                                      ; Get address of message buffer
                                0171
                                                          MOVAB
                                                                     PROC_INFO,R4
                                                                                                      : Get address of process information
                                0178
                                                                     (R4)+,R5
20$; Get next entry
20$; If EQL, no more entries & no match
#16,SERVER(R5),PRCPOL$B_PRCNAM(R6); Compare
                          D0
13
29
                                          339 105:
                                                          MOVL
                                                          BEQL
                   10
                                                          CMPC3
                                                          BNEQ
                                                                                                      : If NEQ, try next one
                                                   A match was found - save info needed for the connect call and build the
                                                   device name
                                                                    #1,B00$GL CONADP ; Don't use an adapter
B00$GL CONCUNIT ; Unit number always 0
B00$GL CONAUNIT ; Same for adapter unit
PRCPOL$L SYSIDL(R6),B00$GQ CUNSYSID ; Save the sys ID from msg
DRIVER(R5),B00$GL CONDRV ; Save the driver name from proc_info
PRCPOL$T_NODNAM(R5),R2 ; Get node name arg from msg
00000000 EF 01
00000000 EF
                                                          MNEGL
                          D4
D4
7D
9E
BBE
10
                                                          CLRL
                                                          CLRL
                                                          MOVQ
               12
08
                                                          MOVAB
                                01Ao
                                                          MOVAB
                                                                     #^M<R5>
                                01AA
                                                                                                        Save pointer to proc_info
Get device name arg from proc_info
                                                          PUSHR
                                OTAC
                                                                     DEVICE (R5), R5
                                                          MOVAB
                                                                                                         Construct the cluster device name
                                01B0
                                                          BSBB
                                                                     BLDNAME
                          BA
                                          357
358
359
360
361
362
363
                                                          POPR
                                                                     #^M<R5>
                                0182
                                                                                                        Restore
                                0184
                                0184
                                01B4
                                                   Connect the device - build the class device database, load the class driver,
                                0184
                                                   and initialize the device
                                01B4
```

#0.B00\$CONNECT R0.15\$

CALLS

BLBS

		PROC			9
	OC 50	E9	01BE 01CD 01D0 01D0	\$CMKRNL_S ROUTIN = 30\$; Polling must be turned on from K mode 8LBC R0,25\$ 367 368; All done 370;	
	007C 8F	8A 05	01D0 01D0 01D0 01D0 01D0 01D4 01D5 01D5	3/1 15%: POPR #^M <r2,r3,r4,r5,r6> ; Restore registers touched here 372 RSB 373</r2,r3,r4,r5,r6>	
50	007C8132 8F FE21* 007C 8F	00 30 8A 05	01D5 01D5 01D5 01D5 01DC 01DF 01E4 01E4 01E4	There was no process name match - we got a spurious mailbox message  77 20\$: 78 MOVL #SYSG\$ CONFIGERR,R0  79 25\$: BSBW   PUTERROR  79 POPR #^M <r2,r3,r4,r5,r6> ; Restore registers touched here  78 RSB  79 25\$: RSBW   RSWW   RSW</r2,r3,r4,r5,r6>	
50	51 52 66 50 01 000000000 GF 007 50 007 813A 8F	0000 9E 00 9A 16 E8 00	111111	There was an error connecting the device — CONNECT already let the  world know.  WORD  MOVAB  MOVAB  MOVAB  MOVL  SPPB(R5),R1  Get SPPB  MOVZBL  MI,R0  SETIPL  MIPL\$ SCS  Raise IPL  JSB  G^SCS\$POLL MODE  SETIPL  MIPL\$ ASTDEL  BLBS  R0,35\$  MOVL  MOVL  MOVL  MOVL  Request polling again  Restore IPL  Rest	

```
- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 VAX/VMS Macro V04-00 Page 10 BLDNAME 4-SEP-1984 23:03:46 [B00TS.SRC]CONFIGURE.MAR;1 (1)
```

```
399
400
401
402
403
                                                            .SBTTL BLDNAME
                                                  :++
                                                      PURPOSE
                                                            Construct cluster device name given the node name and the
                                                            device prefix.
                                     INPUT
                                                            R2 - Address of the node name string (in counted ASCII)
R5 - Address of the device prefix
                                                      OUTPUT
                                                            FULL NAME_PTR - contains address of complete device name string
                                                            BOOSGL_CONDEV - contains pointer into complete device name string,
                                                                               starting at device prefix
                                                            All registers preserved.
                                                      FUNCTIONAL DESCRIPTION
                                                            This routine builds a cluster device name of the form:
                                                      byte
                                                                     0: count of chars in string
                                                               1 to m: node name m+1: "$"
                                                           m+2 to m+4: "xxA", where xx is the device name used by a given server
                                                  BLDNAME:
                                                                     PUSHR
          53 00000000 EF
00000000 GF 83
                                                            MOVAB
                                                                                                    Pointer to output buffer
                                                                                                   Set up ptr for connect
DDB; Make sure size doesn't change
                                                            MOVAB
                                                            ASSUME
                                 9A
BB
28
BA
                                                                                                    Get real length of string
                                                            MOVZBL
                           82
34
54
34
                                                                                                    Save regs destroyed by MOVC3
                                                            PUSHR
                                                                                                    Store node name in buffer
               63
                     62
                                                            MOVC3
                                                                                                    Restore regs (R3 now points to next
                                                                     #^M<R2,R4,R5>
                                                            POPR
                                                                                                    byte in dest. buffer after node name)
                                                                     #^A/$/,(R3)+
(R5),(R3)
#^A/A/,2(R3)
#4,R4,FULL_NAME
                                                                                                    Set in separator
                     83
                           24
65
8F
04
63
                                                            MOVB
                                 B0
90
81
00
90
9E
BA
                                                            MOVW
                                                                                                    Store device prefix
              02 A3
                       41
                                                            MOVB
                                                                                                    Store controller letter
                     54
    00000000°EF
                                                            ADDB3
                                                                                                    String is ASCIC
          00000017'EF
                                                            MOVL
                                                                      (R3), DEVNAME+1
                                                                                                    Store device name
          00000016'EF
                                                            MOVB
                                                                      #3, DEVNAME
                                                                                                    Store count
                                                                     DEVNAME, BOOSGL CONDEY #^M<RO, R1, R2, R3, R4, R5>
00000000 EF
                00000016
                                                            MOVAB
                                                                                                    Store address of device string
                                                            POPR
                                 05
                                                            RSB
```

```
DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18
4-SEP-1984 23:03:46
                                                                                                   VAX/VMS Macro V04-00 [BOOTS.SRC]CONFIGURE.MAR;1
                                                                                                                                           11
                        EXIT_HANDLER
                                                     .SBTTL EXIT_HANDLER
                                               PURPOSE
                                                     Cancel polling on mailbox (if any) at image exit.
                                               INPUT
                                                     Saved SPPB addresses in PROC_INFO table.
                                               OUTPUT
                                                     Cancelled polling.
                       001C
                                                     .ENTRY EXIT_HANDLER, ^M<R2,R3,R4>
         00000000°EF
                                                     MOVAB
                                                              PROC_INFO,R3
                                                                                           ; Get address of process info table
                         D0
13
D0
13
                                           105:
                                                               (R3) + .R4
                                                     MOVL
                                                                                             Point to next info block
                                                                                             If EQL, end of table
Get address of SPPB
                                                               20$
                                                     BEQL
00000033'EF
                18
                                                              SPPB(R4), SPPBARG
                                                     MOVL
                                                                        : If EQL, we haven't polled for this process routin=CANCEL_POLL,—; Cancel polling
                                                     BEQL
                                                               10$
                                                     SCMKRNL_S
                                                                        argist=KARGLST
                18 A4
D9
                         11
                                                     CLRL
                                                                                             Show no more polling for this process
                                                     BRB
                                                                                           : Loop through table
                                                     $DELMBX_S chan=ME
$CMEXEC_S routin=
MOVZWL #SS$_NORMAL,RO
                                           205:
                                                                        chan=MBXCHAN
                                                                                             Mark mailbox for deletion
                                                                        routin=DQLOCKS
                                                                                             Dequeue Locks
              50
                   01
                                                     RET
                                               Kernel mode routine running at IPLS_ASTDEL which cancels the polling mailbox.
                       0004
                                                     .ENTRY CANCEL_POLL, M<R2>
                                                              #IPL$_ASTDEL
4(AP),R1
                                                     SETIPL
         51 04 AC 0000000 EF
                         D0
16
                                                                                             Get SPPB address
                                                     MOVL
                                                              SCS$CANCEL_MBX
                                                     JSB
                                                                                           : Cancel polling
                                                     SETIPL
                         04
                                               Exec mode routine to dequeue all locks held
                       0000
                                                     .ENTRY DQLOCKS, M<>
                                                                       = #0 -
= #LCKSM_DEGALL
                                                     SDEQ_S
                                                              flags
                                                     RET
```

.END

```
- PROCESS TO DYNAMICALLY CONFIGURE DEVIC 15-SEP-1984 23:46:18 VAX/VMS Macro VO4-00 4-SEP-1984 23:03:46 [BOOTS.SRCJCONFIGURE.MAR;1
CONFIGURE
                                                                                                                                                                                                                                       12 (1)
Symbol table
SSTI
                                                        = 00000000
                                                                                                         SYSSCMEXEC
SYSSCMKRNL
                                                                                                                                                                                              SNAMENDS.
                                                           0000002F
                                                                                      000000000000000
                                                        =
                                                                                                                                                                                     GX
SSERVERNAMES
                                                        = 0000001F
                                                                                                         SYS$CREMBX
                                                                                                                                                                                     GX
BLDNAME
                                                                                                         SYS$DCLEXH
                                                                                                                                                                                     GX
BOOSCONF I GURE
                                                            00000008 RG
                                                                                                         SYS$DELMBX
                                                                                                                                                                                     GX
BOOS CONNECT
                                                            *******
                                                                                                         SYS$DEQ
                                                                                                                                                                                     GX
BOOSCONRESET
                                                            *******
                                                                                                         SYSSEXIT
                                                                                                                                                                                     GX
GX
BOUSCONRESET
BOUSGL_CONADP
BOOSGL_CONCUNIT
BOOSGL_CONDEV
BOOSGL_CONDRV
BOOSGQ_CONSYSID
CANCEL_POLL
DEVICE
                                                            *******
                                                                                                         SYS$HIBER
                                                                                                                                                                   *******
                                                                                                         SYS$PURGWS
                                                                                                                                                                                     GX
                                                                                                         SYSSQIO
                                                                                                                                                                   *******
                                                                                                                                                               = 007C813A
= 007C8132
= 00000123
                                                                                                         SYSGS_CANTPOLL
SYSGS_CONFIGERR
                                                            *******
                                                            *******
                                                                                                         WRTATRFLG
                                                           000002A2 RG
                                                       00000016 R
000002B5 RG
= 00000012
0000001B R
00000251 RG
                                                                                      04
DEVNAME
DQLOCKS
DRIVER
DRIVER
EXIT_BLOCK
EXIT_HANDLER
EXIT_STATUS
FOUND PROC
FULL_NAME
FULL_NAME_PTR
10$M_NOW
10$M_WRTATTN
10$_READVBLK
10$_SETMODE
1PL$_ASTDEL
1PL$_SCS
KARGEST
LCK$M_DEGALL
                                                                                      04
05
04
05
05
                                                           000000CE RG
00000000 R
                                                            *******
                                                        = 00000040
                                                        = 00000100
                                                        = 00000031
                                                        = 00000023
                                                        = 00000002
                                                        = 00000008
                                                            0000002F R
                                                                                      04
                                                       = 00000001
00000073 R
0000003B R
00000037 R
LCKSM DEGALL
MBXCHĀN
                                                                                      04 04 05
MSGBUF
MSGBUF S1Z
PR$ IPL
PRCPOL$B PRCNAM
PRCPOL$C SIZ
PRCPOL$L SYSIDL
PRCPOL$T NODNAM
PROCESS RSG
                                                           *******
                                                        = 00000018
                                                        = 00000038
                                                        = 00000000
                                                        = 00000008
                                                                                      05
02
05
05
                                                            0000015F
PROC INFO
PURGE LIMITS
PUTERROR
                                                            00000000 R
                                                            00000000 R
                                                            *******
READFLG
                                                           00000071
REG_POLL
SB$E_DDB
SB$T_NODENAME
SCS$EANCEL_MBX
SCS$POLL_MBX
SCS$POLL_MODE
                                                           0000009¢ R
00000054
                                                                                      05
                                                        = 00000044
                                                            ******
                                                                                      05
05
                                                            *******
                                                            *******
                                                       = 00000000
= 00000018
00000033
= 00000870
= 00000001
00000075
SERVER
SPPB
 SPPBARG
                                                                                      04
SSS_ENDOFFILE
STATUS_BLOCK
                                                                                       04
```

PSECT name	Allocation	PSECT No.	Attributes			
SABS . SABS . INFO_PTR INFO_BLOCK NONPAGED_DATA PAGED_CODE	00000000 ( 0.) 00000000 ( 0.) 0000001C ( 28.) 000000BA ( 186.) 0000007D ( 125.) 000002C7 ( 711.)	00 ( 0.) 01 ( 1.) 02 ( 2.) 03 ( 3.) 04 ( 4.) 05 ( 5.)	NOPIC USR NOPIC USR NOPIC USR NOPIC USR NOPIC USR NOPIC USR	CON ABS L CON REL L	CL NOSHR NOEXE NORD CL NOSHR EXE RD CL NOSHR EXE RD CL NOSHR EXE RD CL NOSHR NOEXE RD CL NOSHR EXE RD	WRT NOVEC BYTE WRT NOVEC BYTE

## ! Performance indicators

Phase	Page faults	CPU Time	Elapsed Time
Initialization Command processing Pass 1	29 115 320	00:00:00.05 00:00:00.69 00:00:10.32	00:00:00.54 00:00:01.93 00:00:21.76
Symbol table sort Pass 2	98	00:00:01.50	00:00:03.69
Symbol table output Psect synopsis output Cross-reference output Assembler run totals	576	00:00:00.12 00:00:00.03 00:00:00.00	00:00:02.67 00:00:00.03 00:00:00.00

The working set limit was 1500 pages.
57546 bytes (113 pages) of virtual memory were used to buffer the intermediate code.
There were 60 pages of symbol table space allocated to hold 1005 non-local and 15 local symbols.
499 source lines were read in Pass 1, producing 35 object records in Pass 2.
33 pages of virtual memory were used to define 31 macros.

## ! Macro Library statistics !

Macro Library name	Macros define
_\$255\$DUA28:[BOOTS.OBJ]BOOTS.MLB;1 _\$255\$DUA28:[SYS.OBJ]LIB.MLB;1 _\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0
\$255\$DUA28:[SYSLIB]STARLET.MLB;2 TOTALS (all libraries)	21

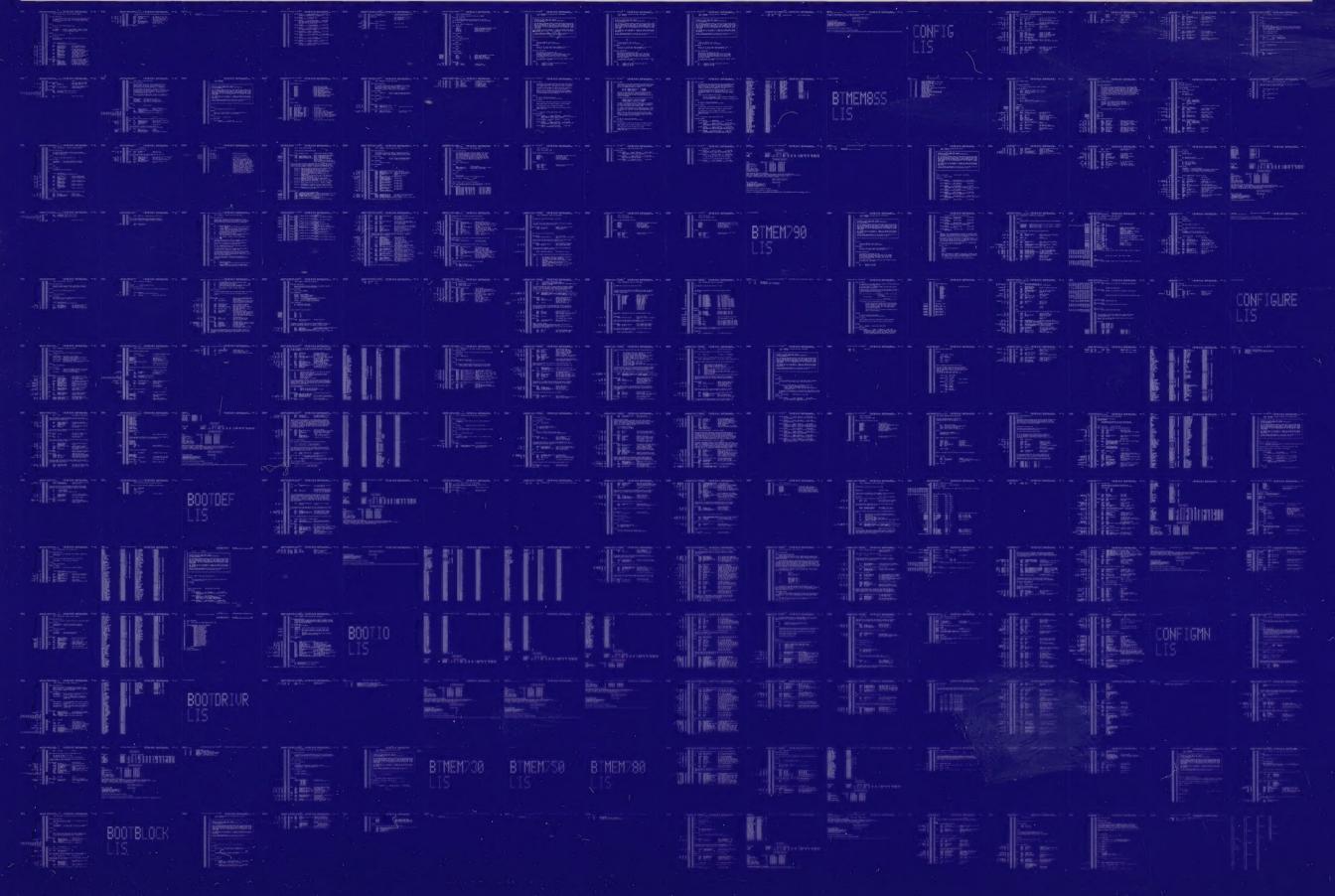
1176 GETS were required to define 27 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LISS:CONFIGURE/OBJ=OBJS:CONFIGURE MSRCS:CONFIGURE/UPDATE=(ENHS:CONFIGURE)+EXECMLS/LIB+LIBS:BOOTS.MLB/LIB

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